REMARKS

With the amendment, the specification is amended, claims 1, 10, 19, and 28 are amended, and claims 8, 17, 26, and 35 are cancelled. Claims 1-7, 9-16, 18-25, 27-34, and 36 are pending in the application, with claims 1, 10, 19, and 28 being the independent claims. Based on the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objection to Specification

1. In the Office Action on page 3, the specification is objected to for not including a section entitled "Brief Summary of the Invention." The specification has been amended to include such a section.

Obviousness Rejection Based on McGaughy in view of Gilbert

2. On pages 3-8, the Office Action rejected claims 1-38 under 35 U.S.C. § 103(a) as being rendered obvious by U.S. Patent Application Publication No. 2005/0143966 to McGaughy in view of U.S. Patent No. 5,805,861 to Gilbert et al. Applicant respectfully traverses the rejection.

Initially, it is noted claims 8, 17, 26, and 35 are cancelled, and the features recited in these claims are now recited in amended claims 1, 10, 19, and 28, respectively.

Claim 1, as amended, recites: a machine-accessible medium that provides instructions, which when executed by a computing platform, cause said computing platform to perform operations comprising a method of: obtaining a first circuit layout design; obtaining a second

circuit layout design; generating a first topology graph for said first circuit layout design; generating a second topology graph for said second circuit layout design; comparing said first topology graph and said second topology graph to obtain a comparison result, wherein said comparison result comprises at least a first matched topology graph node pair and a second matched topology graph node pair connected via a topology graph line pair, said topology graph line pair having a pair of lengths and a pair of widths, wherein said method further comprises: comparing said pair of lengths to a length sensitivity parameter; and comparing said pair of widths to a width sensitivity parameter; and reporting said comparison result.

McGaughy in view of Gilbert fails to teach claim 1 for at least two reasons. First, McGaughy in view of Gilbert fails to teach the recitation of a comparison result that comprises at least a first matched topology graph node pair and a second matched topology graph node pair connected via a topology graph line pair, where the topology graph line pair has a pair of lengths and a pair of widths, where the method further comprises comparing the pair of lengths to a length sensitivity parameter and comparing the pair of widths to a width sensitivity parameter. This feature is recited in original claim 8, which is now cancelled.

In rejecting claim 8, the Office Action on page 8 relied upon the teachings of McGaughy. McGaughy teaches a method for performing analog electrical simulation of subcircuits of an integrated circuit (IC) design, which may have many instances of identical (i.e., redundant) subcircuits. McGaughy, paragraphs [0002], [0096]. A SPICE-like source file 510 of a particular IC design is converted into graph-topology-defining data structures (TDB), model-parameter-defining data structures (GDB), and name-defining data structures (NDB). McGaughy, paragraphs [0024], [0119]. The defined data structures TDB, GDB, and NDB for the particular

IC design are compared to find alike subcircuits. McGaughy, paragraph [0024]. Simulation results for just one of these matching subcircuits is then assumed valid for the other matching subcircuits. McGaughy, paragraph [0098], [0104]-[0105].

In aligning claim 8 with McGaughy, the Office Action pointed to paragraphs [0027] and [0193]-[0257] of McGaughy as teaching the features of the invention recited in claim 8. The sections noted by the Office Action discuss comparing **simulations states** of subcircuits to determine when the simulation states have converged. McGaughy, paragraphs [0024], [0027], [0193]-[0195]. McGaughy is concerned with whether two subcircuits in the same IC design will perform the same during a **simulation**. In contrast, the invention addresses the problem of tracking changes in circuit layout designs **through design iterations**. Specification, page 1, lines 9-13. As such, the comparison of simulation states of subcircuits of McGaughy does **not** teach a **comparison result** having a **first matched topology graph node pair** and a **second matched topology graph node pair** connected via a **topology graph line pair**. Further, the comparison of simulation states of subcircuits of McGaughy does **not** teach a topology graph line pair having a **pair of lengths** and a **pair of widths**. Moreover, the comparison of simulation states of subcircuits of McGaughy does **not** teach **comparing** a **pair of lengths** in a topology graph line pair of a comparison result to a **length sensitivity parameter** and **comparing** a **pair of widths** in a topology graph line pair of a comparison result to a **width sensitivity parameter**. In addition, Gilbert is unable to overcome the failings of McGaughy. Hence, for a first reason, the two-way combination fails to teach claim 1.

Second, the combination of McGaughy and Gilbert teaches away from the claimed invention. As noted above, McGaughy teaches identifying redundant subcircuits in a **single** IC

design for simulation purposes. McGaughy, paragraphs [0096], [0104]-[0105]. In doing so, McGaughy teaches using a **naming database NDB**. McGaughy, paragraph [0119]. The naming database NDB is used to track the names of topology-defining data structures and model-parameter-defining data structures. McGaughy, paragraphs [0025]. On the other hand, Gilbert teaches discovering unchanged logic circuit cones between a current IC design and a previous version of the IC design (i.e., **two** IC designs) where gate and net instances may have had their **names arbitrarily changed** by the automated design tools used. Gilbert, Abstract, lines 1-6; column 1, lines 8-13. One of ordinary skill in the art would **not** combine McGaughy and Gilbert because McGaughy addresses simulation of **one** IC design and Gilbert address comparing **two** IC designs. Moreover, even if one of ordinary skill in the art would combine McGaughy and Gilbert, the naming database NDB of McGaughy would be used to track the name changes as taught by Gilbert, which is **not** the claimed invention. Hence, one of ordinary skill would **not** arrive at the claim invention by combining McGaughy and Gilbert, as postulated by the Office Action. Thus, the combination of McGaughy and Gilbert teaches away from the claimed invention.

Claims 2-7 and 9 depend variously from claim 1, and are allowable as being dependent from an allowable claim.

Claim 10 recites similar features as claim 1 and is allowable for at least similar reasons as discussed above with respect to claim 1.

Claims 11-16 and 18 depend variously from claim 10, and are allowable as being dependent from an allowable claim.

Claim 19 recites similar features as claim 1 and is allowable for at least similar reasons as discussed above with respect to claim 1.

Claims 20-25 and 27 depend variously from claim 19, and are allowable as being dependent from an allowable claim.

Claim 28 recites similar features as claim 1 and is allowable for at least similar reasons as discussed above with respect to claim 1.

Claims 29-34 and 36 depend variously from claim 28, and are allowable as being dependent from an allowable claim.

CONCLUSION

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that all presently outstanding objections and rejections be reconsidered and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

Date: July 26, 2006

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DC2-771772